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| EXAMINER | |
|---|---|
| DAMIANO, ANNE L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2184 | 5 |

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 09/708,205 | Applicant(s) GURUMOORTHY ET AL. | |
|---|---|---|---|
| | Examiner Anne L Damiano | Art Unit 2184 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 November 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,8,10-13,15,16,18-21,23 and 25-28* is/are rejected.

7)☒ Claim(s) *2,7,9,14,17,22,24 and 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 11/7/00 fails to comply with 37 CFR 1.97(c) because it lacks PTO-1449 form. It has been placed in the application file, but the information referred to therein has not been considered.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. The disclosure is objected to because of the following informalities:

Component 8 of figure 1 is labeled non-volatile memory. However, this component is referred to as NVM in the specification, page 4: lines 7, 20 and 27.

Appropriate correction is required.

### *Allowable Subject Matter*

4. Claims 2, 7, 9, 14, 17, 22, 24 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 3-6, 8, 10-13, 15, 16, 18-21, 23 and 25-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Orr (6,189,114).

As in claim 1, Orr discloses a method comprising:

In a storage medium, storing one or more diagnostic modules comprising machine-readable instructions for performing one or more diagnostic procedures of a processing system (figure 2: component 64, column 1: lines 6-9 and column 2: lines 34-37);

Hosting an operating system capable of addressing the storage medium,

Wherein the operating system is capable of initiating execution of the one or more diagnostic procedures through a firmware interface (column 2: lines 42- 46 and line 60-column 3: line 7) (The first program loaded, controlling the reboot of the data processing system is an operating system. The operating system checking the status of the indicator means to determine if diagnostics are to be preformed and executing the test code if so (column 2: lines 42- 46 and line 60-column 3: line 7) indicates that the operating system is capable of executing the diagnostic procedures. Since the system is retrieving data from and EEPROM (column 3: line 5-7) a firmware interface inherently exists in the system.).

As in claim 8, Orr discloses an apparatus comprising:

A processor;

A memory to store data;

Logic to store in the memory one or more diagnostic modules comprising machine-readable instructions for performing one or more diagnostic procedures of a processing system (figure 2: component 64, column 1: lines 6-9 and column 2: lines 34-37); and

An operating system capable of initiating execution of the one or more diagnostic procedures on the processor through a firmware interface (column 2: lines 42- 46 and line 60-column 3: line 7) (The first program loaded, controlling the reboot of the data processing system is an operating system. The operating system checking the status of the indicator means to determine if diagnostics are to be preformed and executing the test code if so (column 2: lines 42- 46 and line 60-column 3: line 7) indicates that the operating system is capable of executing

the diagnostic procedures. Since the system is retrieving data from and EEPROM (column 3: line 5-7) a firmware interface inherently exists in the system.).

As in claims 3 and 10, Orr discloses the method and apparatus, wherein the diagnostic modules comprise runtime drivers executable through the firmware interface (column 5: lines 40-43) (A device driver is inherent for an operating system to communicate to test the peripheral devices mentioned.).

As in claims 4 and 11, Orr discloses the method wherein the diagnostic procedures comprise diagnostic procedures for testing one or more peripheral devices of the processing system (column 5: lines 40-43).

As in claims 5 and 12, Orr discloses the method and apparatus further comprising logic for loading the one or more diagnostic modules into a first physically addressable area of the system memory (column 5: line 66-column 6: line 2); and

Loading the operating system to a second physically addressable area of memory from a non-volatile memory device (column 2: lines 42- 46 and line 60-column 3: line 7) (An operating system is automatically loaded into a physical area of memory, other than that of the diagnostic procedure location, upon startup of a computer.).

As in claims 6 and 13, Orr discloses the circuit further comprising a basic input/output system (BIOS) comprising logic to load the one or more diagnostic modules to the first physically addressable area of the memory (column 5: lines 14-24).

As in claim 15, Orr discloses a circuit for initiating a boot sequence for a processing system, the circuit comprising:

Logic to store in storage medium one or more diagnostic modules comprising machine-readable instructions for performing one or more diagnostic procedures of a processing system (figure 2: component 64, column 1: lines 6-9 and column 2: lines 34-37);

Logic to initiate an operating system capable of addressing the storage medium, wherein the operating system is capable of initiating execution of the one or more diagnostic procedures through a firmware interface (column 2: lines 42- 46 and line 60-column 3: line 7) (Since the system includes diagnostic means to be used during system reboot, it is interpreted that the logic is included with a circuit that initiates a boot sequence for the processing system. The first program loaded, controlling the reboot of the data processing system is an operating system. The operating system checking the status of the indicator means to determine if diagnostics are to be preformed and executing the test code if so (column 2: lines 42- 46 and line 60-column 3: line 7) indicates that the operating system is capable of executing the diagnostic procedures. Since the system is retrieving data from and EEPROM (column 3: line 5-7) a firmware interface inherently exists in the system.).

As in claim 16, Orr discloses the circuit comprising a basic input/output system (BIOS) adapted to integrate with the processing system (figure 2: component 60 and column 5: lines 14-17).

As in claim 18, Orr discloses the circuit, wherein the one or more diagnostic modules comprise run-time drivers executable through the firmware interface (column 5: lines 40-43) (A device driver is inherent for an operating system to communicate to test the peripheral devices mentioned.).

As in claim 19, Orr discloses the diagnostic procedures comprising diagnostic procedures for testing one or more peripheral devices of the processing system (column 5: lines 40-43).

As in claim 20, Orr discloses the circuit further comprising:

Logic to load the one or more diagnostic modules to a first physically addressable area of a system memory (column 5: line 66-column 6: line 2); and

Logic to load the operating system to a second physically addressable area of the system memory from a non-volatile memory device (column 2: lines 42- 46 and line 60-column 3: line 7) (An operating system is automatically loaded into a physical area of memory, other than that of the diagnostic procedure location, from a non-volatile memory, upon startup of a computer. The loaded operating system checking the status of the indicator means to determine if diagnostics are to be preformed and executing the test code if so (column 2: lines 42- 46 and line

60-column 3: line 7) indicated that the operating system is capable of executing the diagnostic procedures.).

As in claim 21, Orr discloses the circuit further comprising a basic input/output system (BIOS) comprising logic to load the one or more diagnostic modules to the first physically addressable area of the memory (column 5: lines 14-24).

As in claim 23, Orr discloses an article comprising:

A storage medium comprising machine-readable instructions stored thereon for:

Initiating storage of machine-readable instructions for performing one or more diagnostic procedures of a processing system in a first physical area of a memory (column 5: line 66-column 6: line 2); and

Initiating storage of machine-readable instructions for executing an operating system for the processing system in a second physical area of the memory,

Wherein the operating system is capable of initiating execution of the one or more diagnostic procedures through a firmware interface (column 2: lines 42- 46 and line 60-column 3: line 7) (An operating system is automatically loaded into a physical area of memory, other than that of the diagnostic procedure location, upon startup of a computer. The loaded operating system checking the status of the indicator means to determine if diagnostics are to be preformed and executing the test code if so (column 2: lines 42- 46 and line 60-column 3: line 7) indicated that the operating system is capable of executing the diagnostic procedures. Since the system is

retrieving data from and EEPROM (column 3: line 5-7) a firmware interface inherently exists in the system.).

As in claim 25, Orr discloses the article, wherein the one or more diagnostic modules comprising run-time drivers executable through the firmware interface (column 5: lines 40-43). (A device driver is inherent for an operating system to communicate to test the peripheral devices mentioned.).

As in claim 26, Orr discloses the diagnostic procedures comprising diagnostic procedures for testing one or more peripheral devices of the processing system (column 5: lines 40-43).

As in claim 27, Orr discloses the article, wherein the storage medium further comprises machine-readable instructions stored thereon for:

Loading the one or more diagnostic modules to a first physically addressable area of a system memory (column 5: line 66-column 6: line 2); and

Loading the operating system to a second physically addressable area of the memory from a non-volatile memory device (column 2: lines 42- 46 and line 60-column 3: line 7) (An operating system is automatically loaded into a physical area of memory, other than that of the diagnostic procedure location, from a non-volatile memory, upon startup of a computer. The loaded operating system checking the status of the indicator means to determine if diagnostics are to be preformed and executing the test code if so (column 2: lines 42- 46 and line 60-column 3: line 7) indicated that the operating system is capable of executing the diagnostic procedures.

Since the system is retrieving data from and EEPROM (column 3: line 5-7) a firmware interface inherently exists in the system.).

As in claim 28, Orr discloses the storage medium further comprising machine readable instructions stored thereon for loading the one or more diagnostic modules to the first physically addressable area of the memory from a basic input/output system (BIOS) (column 5: lines 14-24).

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne L Damiano whose telephone number is (703) 305-8010. The examiner can normally be reached on M-F 9:00AM-6:30PM, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9731. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

ALD

SCOTT BADERMA
PRIMARY EXAMINER